

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matters of)	
)	
Wireless Emergency Alerts)	PS Docket 15-91
)	
Amendments to Part 11 of the Commission's Rules)	PS Docket 15-94
Regarding the Emergency Alert System)	
)	

**REPLY COMMENT OF THE NEW YORK CITY EMERGENCY MANAGEMENT DEPARTMENT ON THE NEED
FOR MULTIMEDIA CAPABILITY IN WIRELESS EMERGENCY ALERTS**

Submitted Electronically June 27, 2018

INTRODUCTION

- 1) The City of New York's Emergency Management Department ("NYCEM" or "the Department" or "the Agency") is pleased to submit a response to publicly-filed comments to the above captioned matters in response to the Federal Communications Commission's Public Safety and Homeland Security Bureau's ("FCC" or "the Commission") request to refresh the record on the need for multimedia capability in Wireless Emergency Alerts ("WEA").¹
- 2) NYCEM sincerely appreciates CTIA and the wireless industry's acknowledgement that the threat environment and mobile wireless technologies have changed since the WEA system was first introduced.² NYCEM applauds their commitment to strengthening the nation's ability to provide improved alerts and warnings and is eager to engage in further dialogue aimed at improving the nation's WEA system.

RESPONSE TO THE PROMOTION OF EMBEDDED URLS AS SUFFICIENT TO SEND MULTIMEDIA CONTENT THROUGH WEA³

- 3) Though NYCEM concurs with CTIA that "embedded links enable alert originators to direct a consumer to any multimedia content that is deemed necessary for the particular emergency,"⁴ NYCEM reminds the Commission that it requires public safety officials to "depend on the proactive initiative of those receiving the [WEA] message and hope they would take additional steps to search the internet on

¹ See 83 Fed. Reg. 18257 (April 26, 2018)

² See CTIA's *Comment Filing*, dated May 29, 2018.

³ See CTIA's *Comment Filing*, page 3, dated May 29, 2018.

⁴ See CTIA's *Comment Filing*, page 3, dated May 29, 2018.

their own.”⁵ NYCEM agrees with the Telecommunications for the Deaf and Hard of Hearing, et al. that “embedded references...[are] an important first step...[but] cannot substitute for the enormous public value of enabling multimedia WEA messages.”⁶ Following the September 2016 Chelsea neighborhood bombing in New York City, a research firm found that while 100 percent of individuals polled received the WEA message that directed people to “see media for pic” of the bombing suspect, less than half of recipients actually looked elsewhere for a photo.⁷

- 4) Additionally, rather than enabling alert originators to integrate content into a streamlined message process, embedded links require alert originators create and update a separate website in real-time with sufficient capacity to support a large influx of traffic in a short period of time. NYCEM fears that while such technology is readily available, it may be beyond the reach of many alert originators due to financial and/or operational limitations. NYCEM notes that maintaining the website infrastructure is just the first step: alert originators will also need to maintain personnel with the skills, abilities, and access to add information to the website at the time of the emergency. With time being a “commodity...we can’t afford to waste,”⁸ NYCEM much prefers a fully integrated solution where incorporating multimedia is part of the WEA creation process in an alert origination tool. NYCEM understands ATIS’ concern of technical constraints transmitting multimedia content over the Cell Broadcast Services⁹ and would welcome dialogue with the Commission, wireless industry, and Federal Emergency Management Agency (“FEMA”) to develop the ability to host multimedia content on servers accessible to alert originators nationwide to transmit the content without passing multimedia directly to a device.

RESPONSE TO THE TECHNICAL CHALLENGES RAISED FOR INCORPORATING MULTIMEDIA IN THE WEA SYSTEM¹⁰

- 5) NYCEM greatly appreciates the wireless industry’s commitment to exploring technological advances that may enhance WEA in the future, and understands there are technical and operational challenges to doing so. However, to respond to evolving threats it is imperative emergency management and public safety leverage evolving technology, particularly wireless services which four out of every five Americans consider “indispensable.”¹¹
- 6) Though NYCEM understands most wireless carriers use 3rd Generation Partnership Project (3GPP) standards to transmit the WEA messages, this approach is not required by Commission rules¹² and the

⁵ See NYPD’s *Comment Filing*, page 1, dated January 16, 2018.

⁶ See Telecommunications for the Deaf and Hard of Hearing, et al. *Comment Filing*, page 1 – 4, dated May 30, 2018.

⁷ See NYCEM’s *Comment Filing*, page 2, dated March 15, 2018.

⁸ See NYPD’s *Comment Filing*, page 2, dated January 3, 2018.

⁹ See ATIS’ *Comment Filing*, page 3, dated May 29, 2018.

¹⁰ See CTIA’s *Comment Filing*, page 6, dated May 29, 2018.

¹¹ See CTIA’s *Wireless Snapshot 2017*. <https://api.ctia.org/docs/default-source/default-document-library/ctia-wireless-snapshot.pdf>. Accessed May 30, 2018.

¹² See FCC’s *Second Report and Order and Second Order on Reconsideration*, page 3. https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0131/FCC-18-4A1.pdf. Accessed June 12, 2018.

Commission has historically refrained from requiring a particular technological approach, instead allowing industry to best meet the defined rules. As the wireless industry has expressed challenges with this approach, NYCEM encourages the industry to explore other technical approaches to transmit multimedia in WEA and supports the industry's effort to further research the use of evolved Multimedia Broadcast Multicast Services ("eMBMS") and/or more traditional multimedia message (MMS) technology.¹³

RESPONSE TO THE WIRELESS INDUSTRY'S NETWORK CONGESTION AND MESSAGE LATENCY CONCERNS

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- 7) Though NYCEM appreciates ATIS' suggestion to allow stakeholders additional time to use the embedded link functionality before incorporating new functionality,¹⁷ NYCEM encourages the Commission to place greater weight on the immediate public safety need for multimedia capacity. This includes comments from Santa Barbara County: because of "flaws and technical limitations that currently plague WEA and EAS, [public safety officials] *cannot* fully depend on them to deliver timely, accurate and targeted information to the public."¹⁸ NYCEM understands there will be trade-offs to send multimedia content through WEA and, consistent with previous filings, reaffirms its position that the public would benefit from WEA-transmitted multimedia content even if such content was delivered with a delay of several minutes following the text portion of a WEA message.¹⁹ However, as the Common Alerting Protocol (CAP) already provides the capability for alert originators to include rich content²⁰ and 4G LTE data speeds have "increased nearly 40 times" since 2007 (and only continue to improve),²¹ it is reasonable to require multimedia functionality for WEA.
- 8) NYCEM also sincerely appreciates the evolving mobile technology that supports WEA, in addition to other consumer technology, and notes that just over one year ago, the wireless industry was opposed to incorporating embedded links, which the industry now promotes.²² According to ATIS' most recent filing, they continue "to prefer the use of embedded URLs."²³ NYCEM is hopeful that the wireless industry will similarly evolve its stance on incorporating multimedia through continued dialogue, research, standards development, and coordination with public safety partners.

¹³ See AT&T's *Comment Filing*, page 5, dated May 29, 2018.

¹⁴ See ATIS' *Comment Filing*, page 3, dated May 29, 2018.

¹⁵ See ATIS' *Comment Filing*, page 3, dated May 29, 2018.

¹⁶ See AT&T's *Comment Filing*, page 2, dated May 29, 2018.

¹⁷ See ATIS' *Comment Filing*, page 3, dated May 29, 2018.

¹⁸ See Santa Barbara County Office of Emergency Management's *Comment Filing*, page 1, dated May 29, 2018.

¹⁹ See NYCEM's *Comment Filing*, page 5, dated May 29, 2018.

²⁰ See FEMA's *Common Alerting Protocol (CAP) Implementation Fact Sheet*. https://www.fema.gov/media-library-data/1450108807753-9a5ba3b082b719d9a63d54b500df8193/CAP_Implementation_Fact_Sheet_2016.pdf.

Accessed May 30, 2018.

²¹ See CTIA's *Messaging Interoperability SMS & MMS*. <https://www.ctia.org/the-wireless-industry/industry-commitments/messaging-interoperability-sms-mms>. Accessed May 30, 2018.

²² See CTIA's *Comment Filing*, page 2, dated January 13, 2016.

²³ See ATIS's *Comment Filing*, page 3, dated May 29, 2018.

RESPONSE TO LACK OF PLANNED IMPROVEMENTS FOR WEA SYSTEM WITH 5G²⁴

- 9) NYCEM was quite surprised and rather disappointed that 5G, which the wireless industry asserts “will be up to 100 times faster than 4G...connect 100 times the number of devices, and respond 5 times as quickly,”²⁵ will have the same technical and operational challenges as WEA in 4G²⁶ and that “the arrival of 5G will not alter the WEA technology roadmap.”²⁷ As 5G technology will be able to support advanced features like remote surgery, commercial drones, and autonomous vehicles,²⁸ it is wholly unreasonable for alert originators to continue to experience the today’s limitations. NYCEM strongly urges the Commission to adopt rules that allow the nation’s WEA system to capitalize on the immense benefits offered by the forthcoming 5G technology. NYCEM is committed to being a continued partner in the WEA enhancement process.

²⁴ See CTIA’s *Comment Filing*, page 12, dated May 29, 2018.

²⁵ See CTIA’s *Wireless Snapshot 2017*. <https://api.ctia.org/docs/default-source/default-document-library/ctia-wireless-snapshot.pdf>. Accessed May 30, 2018.

²⁶ See CTIA’s *Comment Filing*, page 12, dated May 29, 2018.

²⁷ See AT&T’s *Comment Filing*, page 4, dated May 29, 2018.

²⁸ See CTIA’s *The Race to 5G*. <https://www.ctia.org/the-wireless-industry/the-race-to-5g>. Accessed May 31, 2018.